

## ABSTRACT

Performing color management of color image data using a device transform by generating an identifier key based on contents of a color measurement profile for a color device, the color measurement profile containing measurement data corresponding to the color device, determining if a device transform corresponding to the identifier key is present in a device transform cache disposed in a persistent memory, loading, in the case that it is determined that a device transform corresponding to the identifier key is present in the device transform cache, the device transform into a program-accessible transient memory, generating, in the case that it is determined that a device transform corresponding to the identifier key is not present in the device transform cache, a device transform based on the measurement data in the color measurement profile, and storing the generated device transform in the device transform cache in correspondence with the identifier key, and transforming the color image data based on the device transform loaded in the program-accessible transient memory.